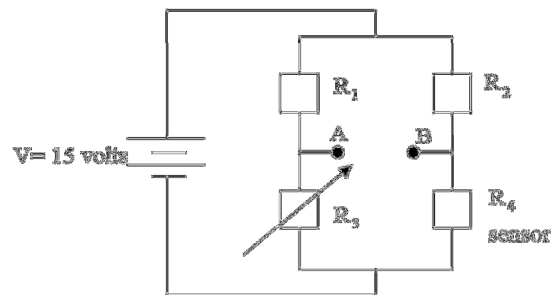


Question_5.

A sensor with a nominal resistance of $60\ \Omega$ is used in a bridge with $R_1 = R_2 = 120\ \Omega$, $V = 12.0\text{ V}$, and R_3 is a $150\ \Omega$ potentiometer. It is necessary to resolve $0.1\ \Omega$ changes of the sensor resistance by connecting a voltmeter as null detector across terminals AB.



Q1 At what value of r_3 will the bridge be nulled?

Q2 what voltage resolution must the voltage detector possess